MAR 1952 ----

CLASSIFICATION RESTRICTED SECURITY INFORMATION CENTRAL INTELLIGENCE AGENCY

INFORMATION FROM FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT CD NO.

COUNTRY SUBJECT

תמכט ווו

Scientific - Electricity, power economy

DATE OF INFORMATION 1951

HOW

PUBLISHED

DATE DIST. 22 May 1953

WHERE

PUBLISHED

Monthly periodical

NO. OF PAGES 2

DATE

PUBLISHED

Jan 1952

Moscow

SUPPLEMENT TO

LANGUAGE Russian

REPORT NO.

THES DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, BITMEN THE MEANING OF TITLE IS, SECTIONS 793 AND 794. OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR SEVE LATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED FERSON IS PROMISSIFED BY LAY, THE REPRODUCTION OF THIS FORM IS AROUSED FREE

THIS IS UNEVALUATED INFORMATION

SOURCE

Promyshlennaya Energetika, No 1, 1952, pp 28-29.

## ECONOMY OF ELECTRIC POWER IN THIRD QUARTER 1951

The Minsk Bligcle Plant saved 117,000 kw-h of electric power by the following measures: replacement of electrical drying cabinets with conveyer drying furnaces heated by a combination of steam and electric power; conversion from electrical to steam drying of parts after painting; conversion of painting and plating shops to continuous operation; elimination of inefficient power consumption in heating up the drying unit.

Minsk Milling Combine No 5 achieved economy of electric power to the extent of 83,500 kw-h by increasing the unit loading per sq cm on roller mills, by changing thread form and pitch on rollers of roller mills, and by reducing idle time between mill reversals.

The Minsk Tractor Plant saved 187,400 kw-h by the following measures: transfer of the iron-casting shop to the central compressor station instead of using an uneconomical compressor in this shop; changing the conditions for cementation and hardening of parts; and replacement of resistance furnaces with high-frequency heating units.

The Radio Center in Minsk saved 113,200 kw-h by the following measures: changing the circuit of the frequency modulator for a KV-4 transmitter, which change eliminated 3 rectifiers from the circuit; conversion of the KTF-1 receiving equipment to a 2-volt supply; changing the measuring-instrument power-supply circuit, thus allowing a 100-kv-a autotransformer to be switched off at small loads; elimination from the KV-4 transmitter circuit of rectifiers for supplying the bias and the preliminary rf stages and conversion of these stages to power supply from a 1.5-kv rectifier.

The Minsk Automobile Plant saved 220,200 kw-h by the additional improvement of methods of melting and pouring malleable iron, additional conversion of electric resistance furnaces for heat treatment of parts to high-frequency heating operation, and installation of 60 idle-arresting devices on metal-cutting tools.

<u>- 1 -</u>

		CLASSIFICATION	N RESTRICTED	
STATE	X NAVY	X NSRB	DISTRIBUTION	
ARMY	X AIR	X FBI		

**STAT** 



. Г

## RESTRICTED

The Combine imeni Frunze saved 120,000 kw-h in the quarter through a 2% increase in recovery of metal resulting from putting into operation a new chamber for precipitation of tailings.

The rail and girder shop of the Metallurgical Plant imeni Petrovskiy saved 643,000 kw-h by increasing the productivity of heating pits and raising the temperature for heating ingots by  $30-40^{\circ}\text{C}$ .

The rolling shop of the plant saved 202,000 kw-h for the quarter by introducing a new calibration system and reducing the shrinkage of billets for seamless pipes.

The shest-rolling shop of the plant saved 400,000 kw-h by redesigning the heating furnaces, changing the configuration of ingots to be rolled, and increasing the rotation speed of the rolling tables.

The Tashtekstil'mash Plant saved 105,000 kw-h by introduction of a gas furnace to dry spindles and cones in place of the electric furnace previously used and by reclamation of rejects by metallization.

The Chirchiksel'mash Plant saved 185,000 kw-h through organizing the production of heavy parts by the centrifugal casting method.

A machine-building plant of the Ministry of Railroads saved 35,000 kw-h by utilizing the compressed air from compressors being stand-tested.

A carborundum plant saved one million kw-h in the quarter by setting up a special electromagnetic sheave to recover and remove magnetic admixtures from return materials, setting up more economical conditions for melting carborundum, and reducing the melting time by 2 hours.

Textile and cotton-treating enterprises of the Uzbek SSR saved 625,000 kw-h during the quarter by the following measures: making automatic the operation of ventilation and humidification equipment, increasing the spindle speed of spinning machines by 10%, raising the productivity of round knitting machines, and other measures.

The electrification service of the Perm' Railroad achieved electric power savings amounting to 4,798,000 kw-h by reduction of the number of cases of wheel spin by electric locomotives, regulation of the graph of loads and losses in networks, shutting down motor-generators, and switching off RV mercury rectifiers? during reduction of loads.

The Kizelugol' Trust saved 1,895,000 kw-h by more efficient operation of the main water-drainage pumps, reduction of the number of hours in operation for compressors, and replacement of lightly loaded transformers and electric motors.

The Chusovoy Metallurgical Plant saved 649,000 kw-h in the following ways: installation of a fifth holding furnace for mill "800," lengthening of the ore-transport trestle, and reduction of the number of passes in mill "650" from 27 to 23.

The Solikamsk Potash Combine saved 216,000 kw-h as a result of replacement of pumps and electric motors of excessive power with lower-power units.

The Bereznikovskiy Soda Plant saved 1,461,000 kw-h by converting baths of old design to baths of improved design, better charging of equipment, use of circulation water for hydrosol removal, and a number of other measures introduced during the first 6 months of 1951.

\_ E N D -

- 2 -

## RESTRICTED

STAT

